Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of operating a subscriber unit to request access to a common transmission medium, said method comprising:

receiving an exclusive assignment to a toneset within an OFDM burst structure in response to detection of an inactive period at said subscriber unit and prior to transmitting an access request, ~~during an inactive period,~~ wherein said toneset represents a non-contention access request channel;

identifying termination of said inactive period;

transmitting an OFDM burst using tones specified by said exclusive assignment while leaving other tones in said OFDM burst available for use by other subscriber units, wherein said OFDM burst comprises ~~an~~ said access request ~~burst~~; and

transmitting data over said common transmission medium using an assigned time slot.

Claim 2 (original): The method of claim 1 further comprising:

converting said OFDM burst into the time domain prior to transmitting said OFDM burst.

Claim 3 (original): The method of claim 1 wherein transmitting said OFDM burst signals termination of a silent period in a voice call.

Claim 4 (previously presented): The method of claim 1 wherein transmitting said OFDM burst comprises transmitting said burst in a time slot determined by a DOCSIS (Data-Over-Cable Service Interface Specification) MAC layer protocol.

Claim 5 (currently amended): A method of operating a central access point to control access to a common transmission medium, said method comprising:

detecting an inactive period at a selected subscriber unit;

sending an exclusive assignment to a toneset within an OFDM burst structure to the selected subscriber unit in response to detection of ~~during~~ said inactive period at the selected subscriber unit and prior to receiving an access request from the selected subscriber unit, wherein said toneset represents a non-contention access request channel;

receiving an ~~access request~~ OFDM burst that includes said toneset as transmitted from said selected subscriber unit, said OFDM burst comprising said access request; and

in response to said access request OFDM burst, assigning at least one time slot to said selected subscriber unit for use of said common transmission medium.

Claim 6 (original): The method of claim 5 wherein said access request OFDM burst includes access request information from subscriber units other than said selected subscriber unit.

Claim 7 (original): The method of claim 6 wherein said toneset transmitted from said selected subscriber unit signals an end to a silent period in a voice call.

Claim 8 (original): The method of claim 5 wherein receiving said access request OFDM burst comprises receiving said access request burst within a time slot determined by a DOCSIS MAC layer protocol.

Claim 9 (currently amended): Apparatus for operating a subscriber unit to request access to a common transmission medium, said apparatus comprising:

a MAC layer processor that receives an exclusive assignment to a toneset within an OFDM burst structure ~~during~~ in response to detection of an inactive period and prior to submitting an access request, wherein said toneset represents a non-contention access request channel; and

an access request burst formation block that transmits an OFDM burst using tones specified by said assignment while leaving other tones in said OFDM burst available for use by other subscriber units; and wherein

said OFDM burst comprises ~~an~~ said access request ~~OFDM burst~~.

Claim 10 (original): The apparatus of claim 9 further comprising:

a transform block that converts said OFDM burst into the time domain.

Claim 11 (original): The apparatus of claim 9 wherein transmitting said OFDM burst signals termination of a silent period in a voice call.

Claim 12 (original): The apparatus of claim 9 wherein said access request burst formation block transmits said OFDM burst in an exclusively reserved time slot determined by a DOCSIS MAC layer protocol.

Claim 13 (currently amended): Apparatus for operating a central access point to control access to a common transmission medium, said apparatus comprising:

a MAC layer processor that sends an exclusive assignment to a toneset within an OFDM burst structure to a selected subscriber unit in response to detection of ~~during~~ an inactive period at the selected subscriber unit and prior to receiving an access request from the selected subscriber unit, wherein said toneset represents a non-contention access request channel; and

a request access processor that receives ~~an access request~~ OFDM burst that includes said toneset as transmitted from said selected subscriber unit, said OFDM burst comprising said access request; and

wherein in response to said access request OFDM burst, said MAC layer processor assigns at least one time slot to said selected subscriber unit for use of said common transmission medium.

Claim 14 (original): The apparatus of claim 13 wherein said access request OFDM burst includes access request information from subscriber units other than said selected subscriber unit.

Claim 15 (original): The apparatus of claim 14 wherein said toneset transmitted from said selected subscriber unit signals an end to a silent period in a voice call.

Claim 16 (original): The apparatus of claim 13 wherein said request access processor receives said access request OFDM burst within a time slot determined by a DOCSIS MAC layer protocol.

Claim 17 (currently amended): Apparatus for operating a subscriber unit to request access to a common transmission medium, said apparatus comprising:

means for receiving an exclusive assignment to a toneset within an OFDM burst structure ~~during~~ in response to detection of an inactive period at the subscriber unit and prior to transmitting an access request, wherein said toneset represents a non-contention access request channel;

means for transmitting an OFDM burst using tones specified by said assignment while leaving other tones in said OFDM burst available for use by other subscriber units; and wherein

said burst comprises ~~an~~ said access request ~~burst~~.

Claim 18 (currently amended): Apparatus for operating a central access point to control access to a common transmission medium, said apparatus comprising:

means for sending an exclusive assignment to a toneset within an OFDM burst structure to a selected subscriber unit in response to detection of ~~during~~ an inactive period at the selected subscriber unit and prior to receiving an access request from the selected subscriber unit, wherein said toneset represents a non-contention access request channel;

means for receiving an ~~access request~~ OFDM burst that includes said toneset as transmitted from said selected subscriber unit, said OFDM burst comprising said access request; and

means for, in response to said access request OFDM burst, assigning at least one time slot to said selected subscriber unit for use of said common transmission medium.

Claim 19 (currently amended): A computer program product for operating a subscriber unit to request access to a common transmission medium, said product comprising:

code that causes reception and processing of an exclusive assignment to a toneset within a burst structure in response to detection of ~~during~~ an inactive period and prior to submitting an access request, wherein said toneset represents a non-contention access request channel;

code that causes transmission of an OFDM burst using tones specified by said assignment while leaving other tones in said OFDM burst available for use by other subscriber units; and

a computer-readable storage medium that stores the codes, wherein

said burst comprises ~~an~~ said access request ~~burst~~.

Claim 20 (currently amended): A computer program product for operating a central access point to control access to a common transmission medium, said product comprising:

code that causes transmission of an exclusive assignment to a toneset within an OFDM burst structure to a selected subscriber unit in response to detection of ~~during~~ an inactive period at the selected subscriber unit and prior to receiving an access request

from the selected subscriber unit, wherein said toneset represents a non-contention access request channel;

code that causes reception of an ~~access request~~ OFDM burst that includes said toneset as transmitted from said selected subscriber unit, said OFDM burst comprising said access request;

code that causes assignment of at least one time slot to said selected subscriber unit for use of said common transmission medium; and

a computer-readable storage medium that stores the codes.

Claim 21 (previously presented): The method of claim 1 wherein the inactive period is a silent period in a voice call.

Claim 22 (previously presented): The method of claim 21 wherein transmitting said OFDM burst comprises transmitting said OFDM burst in response to detecting activity.

Claim 23 (previously presented): The method of claim 1 further comprising receiving data slot grants in response to transmitting said OFDM burst.

Claim 24 (previously presented): The method of claim 1 wherein said toneset comprises a predefined number of tones.

Claim 25 (new): The method of claim 1 wherein said exclusive assignment applies to said inactive period and is removed upon transmittal of said OFDM burst.